

**II. REMARKS**

The present paper includes a Listing of Claims. No amendment has been made to the above-captioned application by this paper. The present paper supplements, and incorporates by reference, Amendment (E), previously filed with the USPTO on August 25, 2006.

Applicants gratefully acknowledge the Examiner's Interview conducted on October 12, 2006 at the USPTO (See Examiner Interview Summary, dated October 12, 2006, of record). However, Applicants respectfully request that the following remarks be entered and considered by the Examiner in view of the new legal argument that the Examiner proffered at the October 12<sup>th</sup> Examiner Interview. More specifically, the Examiner provided Applicants' representatives with a paper captioned "2125 Drawings as Prior Art" (a copy of which is attached herewith as "Exhibit A"), and argued that because the drawings are not to "scale" that the proportions shown in the drawings cannot be relied upon to fulfill the written description requirement. Applicants disagree and contend that the Examiner has misapplied U.S. caselaw for the following reasons.

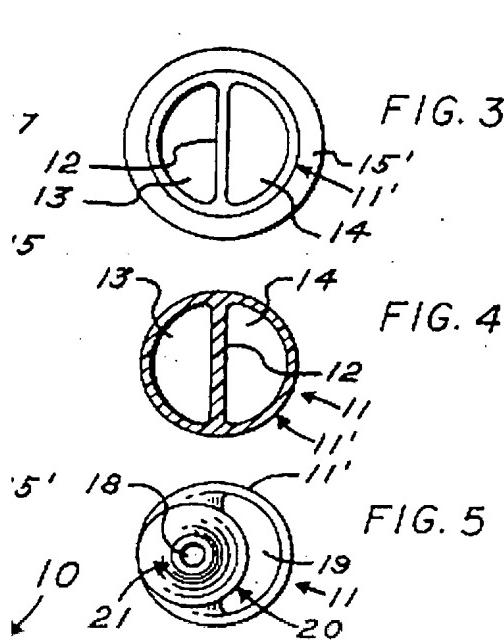
**A. The Law of the Written Description Requirement**

Whether an inventor's disclosure satisfies the written description requirement of 35 U.S.C. § 112, first paragraph, is a question of fact. Gentry Gallery, Inc. v. Berkline Corp., 45 U.S.P.Q.2d 1498, 1502 (Fed. Cir. 1998). The written description requirement is fulfilled whenever the patent disclosure clearly allows a person of ordinary skill in the art to recognize that the inventor invented what is claimed by describing the invention and all of its limitations. Id. It is well established that drawings alone may be sufficient to provide the written description of the invention sufficient to satisfy the written description requirement of Section 112, first paragraph. Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d 1111, 1117 (Fed. Cir. 1991). Drawings alone may be sufficient to satisfy the written description requirement

for claim limitations involving ratios. Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1118 (“The instant claims do not recite only a pair of semi-circular lumens, or a conical tip, or a ratio at which the tip tapers, or the shape, size and placement of the inlets and outlets; they claim a double lumen catheter having a combination of those features.”).

The case of Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q. at 1112, is on point with the present case because the original drawings filed in U.S. Design Application No. 356,081 were used as the priority basis under 35 U.S.C. § 120 for continuation U.S. Utility Application No. 656,601, which issued as U.S. Patent 4,568,329 (hereafter, the “Mahurkar Patent”). Claim 1 of the Mahurkar Patent recites a “double lumen catheter” that includes the limitation “wherein said second cylindrical portion has a diameter substantially greater than one-half but substantially less than a full diameter of said first cylindrical portion” (Mahurkar Patent, col. 4, lines 37-59). The basis for this claimed ratio arises from the drawings of the original design patent, which are shown in the Mahurkar Patent as Figures 3, 4 and 5.

Figures 3, 4 and 5 of the Mahurkar Patent are reproduced below.



As evident from Figures 3, 4 and 5 of the Mahurkar Patent, there is no scale shown in these drawings. In fact, there is no scale shown in any of the drawings, or mentioned in the specification of the Mahurkar Patent (See copy of Mahurkar Patent attached herewith as “Exhibit B”). Thus, it is clear from the Mahurkar Patent and from the ruling of the Federal Circuit in Vas-Cath Inc. v. Mahurkar that drawings, whether or not to scale, may satisfy the written description requirement of 35 U.S.C. § 112, first paragraph, with respect to describing dimensionless ratios between elements shown in the drawings. Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1119.

In sum, it is a well-established proposition that the drawings of a patent may satisfy the written description requirement regarding claim limitations, including ratios recited between certain elements. In this case, the Examiner asserts that the limitation of independent claims 23 and 26, wherein “the plate has a...thickness exceeding one half of the first distance,” is not supported by the drawings, in particular Figure 6, because (1) the thickness of the plate does not exceed one half of the first distance at its periphery although the Examiner admits that “the thickness of the plate may appear to exceed one half the first distance at its center,” and (2) “Patent Office drawings cannot be relied upon for detail as to disclosure since they are not to scale.” (Office Action, dated May 10, 2006, at 3, lines 7-23). The Examiner’s contentions are untenable and should be withdrawn for the following reasons.

**B.      The Drawings are Drawn to Scale**

The Examiner contends that the drawings are not drawn “to scale” and therefore cannot be relied upon for detail (Office Action, dated May 10, 2006, at 3, lines 7-23). However, the drawings of the above-captioned application are drawn “to scale.”

As shown in Figure 12, which illustrates an end view of a “reactor structural component” (3), a “scale” in centimeters is provided. According to the testimony of Mr. Hasegawa, a person of ordinary skill in the art would realize that the radius of the reactor structural component (3) shown in Figure 12 is about 5 to 6 cm (Second Hasegawa Declaration Under Rule 132, of record, hereafter the “Second Hasegawa Declaration,” ¶¶ 7 and 9). At the October 12<sup>th</sup> Examiner Interview, the Examiner agreed that Figure 12 has a “scale;” however, it is the Examiner’s contention that the scale shown in Figure 12 is not material to the subject matter illustrated in Figure 6.

Applicants disagree for the following reasons. First, Figure 6 is a sectional illustration of an embodiment of a reactor for generating moisture in accordance with the present invention (See Applicants’ original specification, at 8, lines 11-12). Second, Figure 12 illustrates “an end view of the reactor structural component” (emphasis added), which is the same reactor structural component (3) shown in Figure 6. In Figure 6, it is the reactor structural component (3) itself, which has a radius of 5-6 cm, that provides the “scale” for Figure 6.

Mr. Hasegawa has testified that a person of ordinary skill in the art would know that the structural component shown in Figure 12 is the same structural component shown in Figure 6 (Second Hasegawa Declaration, ¶¶ 7 and 9). Mr. Hasegawa has also testified that a person of ordinary skill in the art would know that the radius of the structural reactor component shown in both Figures 6 and 12, therefore, would be 5-6 cm (Second Hasegawa Declaration, ¶¶ 7 and 9). Thus, the “scale” shown in Figure 6 is defined by the radius of the structural reactor component (3), which is about 5-6 cm.

For all of the above reasons, the Examiner’s contention that Figure 6 is not “to scale” is groundless so that the rejection under 35 U.S.C. § 112, first paragraph, is untenable and should be withdrawn.

**C. Scale is Immaterial to the Claimed Ratio**

The Examiner asserts that the limitation of independent claims 23 and 26, wherein “the plate has a...thickness exceeding one half of the first distance,” is not supported by the drawings, in particular Figure 6, because (1) the thickness of the plate does not exceed one half of the first distance at its periphery although the Examiner admits that “the thickness of the plate may appear to exceed one half the first distance at its center” (Office Action, dated May 10, 2006, at 3, lines 7-23).

Applicants have previously amended independent claims 23 and 26 to recite that the “plate” has “a maximum thickness exceeding one half of the first distance” as supported by Figure 6 as originally filed (See Amendment (E), filed August 25, 2006). As amended, claims 23 and 26 take into account that the “plate” does not have a uniform thickness and requires only that the “maximum thickness” of the plate exceed one half the first distance as is clearly shown in Figure 6, which overcomes the Examiner’s objection that the periphery of the plate does not have the recited thickness.

Applicants point out to the Examiner that the claim limitation of claims 23 and 26, wherein “the plate has a...thickness exceeding one half of the first distance,” defines “thickness” in terms of a ratio between the “plate” and the “first distance.” According to the testimony of Mr. Hasegawa, it is a fact that this ratio is dimensionless and, therefore, is independent of scale (Second Hasegawa Declaration, ¶ 6). Furthermore, it is the Applicants’ understanding from the October 12<sup>th</sup> Examiner Interview that it is not the Examiner’s position that the drawings are misdescriptive or that the proportions shown in the drawings are inaccurate. Instead, Applicants understand the Examiner’s position to be that, because the drawings are not “to scale,” the drawings cannot support the claimed ratio limitation.

In support of the Examiner's position, the Examiner provided Applicants' representatives during the October 12<sup>th</sup> Examiner Interview with a copy of the paper captioned "2125 Drawings as Prior Art" (Exhibit A). This paper pertains to the use of a patent as "prior art" and not to the scope of what a drawing may provide for the purposes of satisfying the written description requirement of patent claims. Therefore, the paper captioned "2125 Drawings as Prior Art" is irrelevant to the present case and is insufficient to overcome the law of Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1118, which permits the use of drawings having no scale to satisfy the written description requirement for ratio limitations recited in a claim.

The paper captioned "2125 Drawings as Prior Art" cites two cases under the subheading "Proportions of Features in a Drawing are not Evidence of Actual Proportions when Drawings are not to Scale," namely, Hockerson-Halberstadt, Inc. v. Avia Group Int'l, 55 U.S.P.Q.2d 1487 (Fed. Cir. 2000) and In re Wright, 193 U.S.P.Q. 332 (C.C.P.A. 1977). These cases, however, cannot be applied to the present facts for the following reasons.

In Hockerson-Halberstadt, Inc. v. Avia Group Int'l, 55 U.S.P.Q.2d at 1489, the patent pertained to footwear having a "central longitudinal groove" wherein the inventor, after filing the application, submitted drawings during prosecution as part of an argument to distinguish his "central longitudinal groove" on the basis of size from what was shown by the prior art. During an infringement suit, the patent holder argued that arguments made by the inventor during patent prosecution were erroneously construed by the trial court as a disavowal of subject matter, although the Federal Circuit was not persuaded. Hockerson-Halberstadt, Inc. v. Avia Group Int'l, 55 U.S.P.Q.2d at 1491. The Federal Circuit held that because patent drawings, when not drawn to scale, may not define precise proportions, such drawings cannot be relied upon to show particular sizes. Id.

In other words, the Federal Circuit in Hockerson-Halberstadt, Inc. v. Avia Group Int'l would not permit the patent holder to establish a particular absolute width for the “central longitudinal groove” because the patent drawings were not to scale and the inventor had made certain statements during patent prosecution that disclaimed the particular width in order to distinguish the invention over prior art. Thus, the Hockerson-Halberstadt, Inc. v. Avia Group Int'l case pertains to determining, from the inventor’s original drawings and from subsequent drawings and disclaimers made by the inventor during patent prosecution, that the width of the “central longitudinal groove” is not wider than the combined width of the fins of the footwear. Id. The Hockerson-Halberstadt, Inc. v. Avia Group Int'l case does not pertain to limitations that relate to a dimensionless ratio recited between claim elements.

In sum, Hockerson-Halberstadt, Inc. v. Avia Group Int'l simply does not apply to the facts of this case because in Hockerson-Halberstadt, Inc. v. Avia Group Int'l the inventor made statements during patent prosecution to limit the scope of the subject matter shown in his drawings. No such limiting statements have been made by the Applicants in the present case. Furthermore, the claim limitation at issue in Hockerson-Halberstadt, Inc. v. Avia Group Int'l was an absolute width and not a dimensionless ratio such as would be supported by drawings in accordance with the Federal Circuit’s holding in Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1119.

In In re Wright, 193 U.S.P.Q. at 333, the patent application pertained to whiskey barrels that are sealed by forcing each barrel head into its respective croze and securing the staves with hoops. The Patent Office argued that a prior art patent to Bauer taught a chime length of  $\frac{1}{2}$  to 1 inch for each whiskey barrel although the figures in Bauer’s patent were not drawn to scale. In re Wright, 193 U.S.P.Q. at 335. The court held that the drawings of Bauer’s patent were not drawn to scale so one of ordinary skill in the art could not determine the actual length of the chime. Id.

The Wright case is inapplicable to the present case for multiple reasons. First, the Wright case is directed to the scope of what a prior art patent teaches and not to the issue of the written description requirement of 35 U.S.C. § 112, first paragraph. The Wright case does not pertain to the subject matter scope of what drawings support with respect to satisfying the written description requirement for a claimed invention. Second, Figure 6 of the present application, when viewed with Figure 12, is drawn “to scale” as discussed above. Third, the Wright case pertains to determining an absolute length of an element shown in a prior art drawing, and it does not address any dimensionless ratio such as would be supported by drawings in accordance with the Federal Circuit’s holding in Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1119.

In sum, the Wright case pertains to how to interpret the scope of subject matter taught by a prior art patent and it does not pertain to whether figures of a patent application satisfy the written description requirement regarding limitations that are dimensionless ratios illustrated by the original drawings.

For all of the above reasons, the Examiner’s contention that Figure 6 does not teach the limitation wherein the “plate” has “a maximum thickness exceeding one half of the first distance” is controverted by factual evidence and the proposition that a drawing alone may provide a written description of the invention, sufficient to satisfy statutory requirements, when the drawing discloses the claimed invention to one skilled in the art. Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1117 (Fed. Cir. 1991).

As discussed above with respect to Vas-Cath Inc. v. Mahurkar, the Federal Circuit found that a drawing in a design application could support a later utility application, and that the lower court erred in “applying a legal standard that essentially required the drawings of the '081 design application to necessarily exclude all diameters other than those within the

claimed range.” *Id.* The facts in the present application are analogous to those in Vas-Cath, which is controlling law.

A copy of U.S. Patent 4,568,329 is attached herewith as Exhibit B. U.S. Patent 4,568,329 was one of the patents involved in Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1112. As evident from U.S. Patent 4,568,329, Figures 1-6, which are not drawn to scale and correspond to those of the parent design patent application No. 356,081, these drawings serve to satisfy the written description requirement for claim 1. Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1117-19. Claim 1 of U.S. Patent 4,568,329 recites “wherein said second cylindrical portion has a diameter substantially greater than one-half but substantially less than a full diameter of said first cylindrical portion” (col. 4, lines 56-59). In other words, as evident from U.S. Patent 4,578,329 and parent U.S. Design Application No. 356,329, drawings that are not to scale may be sufficient to support claim limitations pertaining to a ratio between elements in accordance with the ruling of the Federal Circuit in Vas-Cath Inc. v. Mahurkar, 19 U.S.P.Q.2d at 1117-19.

### III. CONCLUSION

For all of the reasons stated in Amendment (E), filed August 25, 2006, claims 1, 22, 23, 25, 26, 28 and 30-37 are in condition for allowance, and a prompt notice of allowance is earnestly solicited. Additionally, for all of the reasons stated in the present paper, original Figure 6 of the above-captioned application is sufficient to satisfy the written description requirement for the dimensionless ratio recited by independent claims 23 and 26, namely, wherein “the plate has a...thickness exceeding one half of the first distance.”

Questions are welcomed by the below signed attorney of record for the Applicants.

Respectfully submitted,

*GRIFFIN & SZIPL, P.C.*

  
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Joerg-Uwe Szipl  
Registration No. 31,799

GRIFFIN & SZIPL, P.C.  
Suite PH-1  
2300 Ninth Street, South  
Arlington, VA 22204

Telephone: (703) 979-5700  
Facsimile: (703) 979-7429  
Email: [GandS@szipl.com](mailto:GandS@szipl.com)  
Customer No.: 24203